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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/522,345 Filing Date: March 10, 2005

Appellant(s): BECKMANN ET AL.

Kevin R. Spivak
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed Mar. 17, 2008 appealing from the Final Rejection mailed Sep. 17, 2007.

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(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

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(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings

which will directly affect or be directly affected by or have a bearing on the Board's decision in

the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

Reddy US PGPub: US 2004/0043791 A1 Mar. 4, 2004

Lin US Patent: US 6,078,811 Jun. 20, 2000

Le US Patent: US 6,556,820 Apr. 29, 2003

3GPP TS 31.111 version 4.5.0 Release 4, 2001-12.

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(9) Grounds of Rejection

Claim Rejections - 35 USC § 112

The 112 2nd paragraph rejection has been withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 16, 17, 19, 23, 24, 26, 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reddy, US PGPub: US 2004/0043791A1 Mar. 4, 2004, and in view of Lin, US Patent: 6,078,811 Jun. 20, 2000.

Regarding claims 16, 23 and 30, which claims, "a wireless local network", Reddy discloses, a Wireless Local Area Network – WLAN (paragraphs 0031 and 0037, claims 20 and 23).

Further claimed feature, "a UMTS terminal station having USIM/SAT functionality", Reddy discloses, in 3rd Generation – 3G Universal Mobile Telecommunication Systems – UMTS, User Equipment – UE consists of Mobile Equipment – ME and a removable smart card called the UMTS Subscriber Identity Module – USIM (Fig. 1, and paragraphs 0003, 0004, 0006, 0007, 0015, 0016 and 0030).

Further claimed feature, "parts for monitoring activity of the wireless local network", Reddy discloses, when request to connect the MS 110 is received – S1, the PLMN and IMSI information is transferred from the USIM or SIM card 115 to the handset 110 for facilitating an initial cell search and to camp on the cell determined from the search – S2. After successful camping on a cell MS or UE receives system information. A communication link between the MS or UE 105 and a UTRAN node 120 is established, and system information is sent from the UTRAN node 120 to the MS or US 105 – S3A and S3B (Fig. 1). The handset has unique handset identity for transmitting, receiving and

processing wireless communications. The handset selectivity transmits information to one or more networks for establishing a communication link with the networks.

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Here, the handset is searching for cell, teaches the handset is monitors the network, and after successful searching, the handset receives system information, so the handset has claimed parts for monitoring activity of the wireless local network (paragraph 0016).

Further claimed feature, "after successful detection of local network activity, parts for transmitting at least one of a type and an identity number of the wireless local network to the terminal station", Reddy discloses, after successful camping on a cell MS or UE receives system information. A communication link between the MS or UE 105 and a UTRAN node 120 is established, and system information is sent from the UTRAN node 120 to the MS or US 105 – S3A and S3B. Here, the system information needs to include at least the type of the wireless local network like, if the network is say CDMA, GSM, 3G, TDMA, along with the cell ID of the service provider cell and/or network ID that provides the service to the mobile, reads on the claimed feature, an identification number of the wireless local network (Figs. 1, 4/S10, 5/S16B, 6/S22B, and 7/S29B).

Further claimed feature, "parts for **initiating** a logical connection between the wireless local network and the terminal station", Reddy discloses, the handset 220 or UE 105 sends a connection request including the stored IMSI information to the Core Network 125 through UTRAN node 120 or with IP address (Figs. 4/S9 and S11, 5/S17, 6/S23,

7/S30). Here, the handset is initiating a logical connection between the handset and core network, through UTRAN Node 120.

Here, Reddy teaches, once the mobile unit receives the system information, the mobile initiates the connection request with IP address and/or User information to UTRAN node 120,

but, is silent on, "using an existing connection" and "parts for polling specific subscriber data of the wireless local network for the logical connection".

Lin teaches, "using an existing connection", the existing mobile user U1 sends req_msg to VLR2 of the visiting network (Fig. 7, step s6.3, column 6, lines 13 – 49),

Lin further teaches, "parts for polling specific subscriber data of the wireless local network for the logical connection", the VLR2 requests profile of the mobile user U1 form the HLR. Here, the VLR2 is polling the specific subscriber data, which can include what kind of the wireless network systems the mobile subscriber can use, specific features that the mobile subscriber had accessed, reads on the claimed feature, polling specific subscriber data of the wireless local network for the logical connection (Fig. 7, steps s6.3 - s6.6, column 6, line 50 through column 7, line 11).

It would have been obvious to one of ordinary skill in the art, at the time of invention, to modify mobile unit having internet protocol functionality of Reddy, wherein, the handset

with USIM card (Fig. 2/200), would have incorporated the handset (the handset sends request message to VLR2, and VLR2 polls the data from the HLR and passes on to the subscriber, polls specific subscriber data of the wireless local network (Lin, Fig. 7) of Lin, for the mobile station selectively transmits information to one or more networks for establishing a communication link with the network (Reddy, paragraph 0016).

Regarding claims 17 and 24, Reddy discloses all the claimed features,

but, is silent on, "polling a temporary status of at least one of the wireless local network and the specific subscriber data of wireless local network at periodic intervals".

Lin teaches, "parts for polling specific subscriber data of the wireless local network for the logical connection", the VLR2 requests profile of the mobile user U1 form the HLR. Here, the VLR2 is polling the specific subscriber data, which can include what kind of the wireless network systems the mobile subscriber can use, specific features that the mobile subscriber had accessed, reads on the claimed feature, polling specific subscriber data of the wireless local network is polled periodically. Here, the VLR2 itself stating for visiting location register, and it self explains that the information stored for status of wireless local network and the specific subscriber data is temporary, as once the mobile subscriber visits another VLR2, the information specific to the mobile subscriber is overwritten at the VLR2 (Fig. 7, steps s6.3 - s6.6, column 6, line 50 through column 7, line 11).

It would have been obvious to one of ordinary skill in the art, at the time of invention, to modify mobile unit having internet protocol functionality of Reddy, wherein, the handset with USIM card (Fig. 2/200), would have incorporated the handset (the handset sends request message to VLR2, and VLR2 polls the data from the HLR and passes on to the subscriber, polls temporary specific subscriber data of the wireless local network (Lin, Fig. 7) of Lin, for the mobile station selectively transmits information to one or more networks for establishing a communication link with the network (Reddy, paragraph 0016).

Regarding claims 19 and 26, which claims, "the terminal station comprises a universal chip card which initiates the monitoring of the activity of the wireless local network and the transmission of data to the terminal station", Reddy discloses, in 3rd Generation – 3G Universal Mobile Telecommunication Systems – UMTS, User Equipment – UE consists of Mobile Equipment – ME and a removable smart card called the UMTS Subscriber Identity Module – USIM (Fig. 1, and paragraphs 0003, 0004, 0006, 0007, 0015, 0016 and 0030).

Reddy discloses, when request to connect the MS 110 is received – S1, the PLMN and IMSI information is transferred from the USIM or SIM card 115 to the handset 110 for facilitating an initial cell search and to camp on the cell determined from the search – S2. After successful camping on a cell MS or UE receives system information. A communication link between the MS or UE 105 and a UTRAN node 120 is established,

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and S3B (Fig. 1). The handset has unique handset identity for transmitting, receiving and processing wireless communications. The handset selectivity transmits information to one or more networks for establishing a communication link with the networks.

Here, the handset is searching for cell, teaches the handset is monitors the network, and after successful searching, the handset receives system information, so the handset has claimed parts for monitoring activity of the wireless local network (paragraph 0016).

Claims 18, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reddy, US

PGPub: US 2004/0043791A1 Mar. 4, 2004, and in view of

Lin, US Patent: 6,078,811 Jun. 20, 2000, and further in view of

Le, US Patent: US 6,556,820 Apr. 29, 2003.

Regarding claims 18 and 25, both Reddy and Lin, discloses all the claimed features,

but, are silent on, "the specific subscriber data includes a type/identity number, a subscriber identification, a password, a secret key for data encryption and decryption and an address of an access node".

Le teaches, the mobile can initiate a location update either on its own or on command from the network – periodic location update. The location areas are identified by Location Area Identification – LAC (column 9, lines 4 - 20). Each cell has the cell

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identity – CI, which the network node broadcasts. Here, when it is initiated by the network command, which is the same as the claimed polling subscriber data of the wireless local network. The mobile station 110 consists of Mobile Equipment 124, and SIM 126 (Fig. 1, Fig. 9/930 – dual mode terminal), the SIM/USIM card 205 contains the International Mobile Subscriber Identity – IMSI, used to identify the subscriber to the system, a secret key for authentication and **other information** (column 6, lines 21 – 29). Here, the other information can include the specific subscriber data, type/identity number, a subscriber identification, a password, a secret key for data encryption and decryption, and an address of an access node. Le further teaches, handovers between UMTS and GSM (Fig. 9).

It would have been obvious to one of ordinary skill in the art, at the time of invention, to modify mobile unit having internet protocol functionality of Reddy and Lin, wherein, the handset with USIM card (combined Reddy and Lin, Fig. 2/200), the handset polls specific subscriber data of the wireless local network (Le, Figs. 1 and 2), and the mobile station can initiate update the subscriber location information or react on network command, for reducing a waste of processing load on the terminal and the various network nodes (Le, column 2, lines 54 – 58), for the mobile station selectively transmits information to one or more networks for establishing a communication link with the network (Reddy, paragraph 0016).

Claims 20 – 22, 27 - 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over

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Reddy, US PGPub: US 2004/0043791A1 Mar. 4, 2004, and in view of

Lin, US Patent: 6,078,811 Jun. 20, 2000, and in further view of

3GPP TS 31.111 version 4.5.0 Release 4, 2001-12.

Regarding claims 20 and 27, Reddy and Lin discloses all the claimed features,

but, are silent on, "the terminal station notifies the universal chip card of a deactivation of the wireless local network".

The technical specification 3GPP TS 31.111 version 4.5.0 Release 4, Dec. 2001 teaches, once the ME has made its attempt to execute a proactive command from the UICC, the ME shall inform the UICC of the success or otherwise of that command, by using TERMINAL RESPONSE. This message gives the command details, including the number of command, a general result and sometimes more specific information (Section: 6.7). It also teaches, ME informs UICC for NO SERVICE is currently available, NO radio resource currently available, which reads on the claimed "the terminal station notifies the universal chip card of a deactivation of the wireless local network".

It would have been obvious to one of ordinary skill in the art, at the time of invention, to modify mobile unit having internet protocol functionality of Reddy, wherein, the handset with USIM card (combined Reddy and Lin, Fig. 2/200), for the mobile station selectively transmits information to one or more networks for establishing a communication link

with the network (Reddy, paragraph 0016), and further notifying the status information to the universal chip card of the commands initiated by the universal chip card, for avoiding suspension of service provisioning to the user and to allow the ME access to the 3G functionality of the UICC if a USAT application is taking an unreasonable amount of time to complete execution (3GPP standard, section 6.1, lines 5-10).

Regarding claims 21 and 28, Reddy and Lin discloses all the claimed features,

but, are silent on, "the universal chip card initiates a cleardown of the logical connection between the wireless local network and the terminal station".

The technical specification 3GPP TS 31.111 version 4.5.0 Release 4, Dec. 2001 teaches, the UICC can issue variety of commands like DISPLAY TEXT, POLL INTERVAL, RECEIVE DATA, PROVIDE LOCAL INFORMATION, SEARVICE SEARCH, SET UP CALL – disconnecting all other calls and many more (section 6.1). Here, disconnecting call reads on the claimed "the universal chip card initiates a cleardown of the logical connection between the wireless local network and the terminal station".

It would have been obvious to one of ordinary skill in the art, at the time of invention, to modify mobile unit having internet protocol functionality of Reddy, wherein, the handset with USIM card (combined Reddy and Lin, Fig. 2/200), and the mobile station selectively transmits information to one or more networks for establishing a

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communications link with the networks (Reddy, paragraph 0016), and further notifying the status information to the universal chip card of the commands initiated by the universal chip card, for avoiding suspension of service provisioning to the user and to allow the ME access to the 3G functionality of the UICC if a USAT application is taking an unreasonable amount of time to complete execution (3GPP standard, section 6.1, lines 5-10).

Regarding claims 22 and 29, Reddy and Lin discloses all the claimed features,

but, are silent on, "the terminal station acknowledges all data transmitted".

The technical specification 3GPP TS 31.111 version 4.5.0 Release 4, Dec. 2001 teaches, once the ME has made its attempt to execute a proactive command from the UICC, the ME shall inform the UICC of the success or otherwise of that command, by using TERMINAL RESPONSE. This message gives the command details, including the number of command, a general result and sometimes more specific information (Section: 6.7). It also teaches, ME informs UICC for NO SERVICE is currently available, NO radio resource currently available, which reads on the claimed "the terminal station notifies the universal chip card of a deactivation of the wireless local network".

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify mobile unit having internet protocol functionality of Reddy, wherein, the

handset with USIM card (combined Reddy and Lin, Fig. 2/200), and the mobile station selectively transmits information to one or more networks for establishing a communications link with the networks (Reddy, paragraph 0016), and further notifying the status information to the universal chip card of the commands initiated by the universal chip card, for avoiding suspension of service provisioning to the user and to allow the ME access to the 3G functionality of the UICC if a USAT application is taking an unreasonable amount of time to complete execution (3GPP standard, section 6.1, lines 5-10).

(10) Response to Argument

Applicant's argument:

"Under Reddy, the mobile unit does not monitor activity of the wireless local network using an existing connection as presently claimed", on page 14, lines 18 - 25.

Examiner's answer:

The office action informs that Reddy is silent on "using an existing connection". At the same time, Lin teaches, "using an existing connection", the existing mobile user U1 sends req_msg to VLR2 of the visiting network (Fig. 7, step s6.3, column 6, lines 13 – 49), the VLR V2 transmits message to HLR that manages the mobile terminal U1 indicating that the mobile terminal U1 has been registered at VLR V2 (column 6, lines 39 – 45).

Applicant's argument:

"Applicant cannot find where in Reddy it is disclosed that at least one of the type and identity number of the wireless local network is transmitted to the terminal station following successful detection of local network activity", on page 14, lines 26 - 27.

Examiner's answer:

Examiner asserts that Reddy discloses, after successful camping on a cell, MS or UE receives system information. A communication link between the MS or UE 105 and a UTRAN node 120 is established, and system information is sent from the UTRAN node 120 to the MS or US 105 – S3A and S3B. Here, the system information needs to include at least the type of the wireless local network like, if the network is say CDMA, GSM, 3G, TDMA, along with the cell ID of the service provider cell and/or network ID that provides the service to the mobile, which reads on the claimed feature, an identification number of the wireless local network (Figs. 1, 4/S10, 5/S16B, 6/S22B, and 7/S29B). Reddy also discloses, the mobile unit has multi-network capabilities which allow it to communicate with an IP-based network and a cellular network. The steps for establishment of communications between a mobile unit 200 and a plurality of networks, where, at step 820, drops established connection with first network and route first network services through second network. Here, once the mobile is on the second network, the network provider informs the mobile the system information, which

includes the cell ID and/or network ID that provides the service to the mobile (ABSTRACT, Fig. 8, paragraph 0035).

Applicant's argument:

"the reception of the system information in Reddy is disclosed as being transmitted from a node within a Radio Network Controller – RNC, Fig. 1/s3B, Fig. 6/s22B and Fig. 7/s29B which is not considered a wireless local network, on page 15, lines 4 – 7.

Examiner's answer:

Reddy discloses, a system 400 including at least one mobile unit 200, a cellular network 405 and an IP-based network 410. The mobile unit 200 selectively transmits an IP address 340 and IMSI information 330, stored in the removable storage module 210 (shown in FIG. 2) of the mobile unit 200, to one or more networks, such as a cellular network 405 and an IP-based network 410. The mobile unit 200 has multi-network capabilities allowing it to communicate with the IP-based network 410 and the cellular network 405 at the same time. The mobile unit 200 communicates with the cellular network 405, via a connection established using the IMSI information 330 (S8, S9), to transmit and receive cellular services (S10). The mobile unit 200 communicates with the IP-based network 410 (S11, S12) using the IP address to transmit and receive IP data services (S13). In one embodiment, the connection established with the cellular network 405 may be dropped and the existing cellular network services may be provided through the IP-based network 410. In another embodiment, mobile unit 200 may simultaneously

communicate with the cellular network 405 and the IP-based network 410. Alternatively, mobile unit 200 may communicate with **a wireless local area network (LAN)**, rather than IP-based network 410 – Fig. 4, paragraph 0031.

Reddy further discloses, the IP address stored in the mobile unit 200 can be used in scenarios for handoff between a cellular system and a Wireless Local Area Network - WLAN - paragraph 0037.

Furthermore, in response to applicant's argument above that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., that the type and identity number are transmitted by or from a wireless local network) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In the instant case, the claim is broad enough and does not preclude the application of Reddy's teaching about the transmission of system information since the claim language does not specify from where this information is being transmitted.

Applicant's argument:

"Reddy fails to teach or suggest the feature of initiating a logical connection between the wireless local network and the terminal station", on page 15, lines 13 - 14.

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Examiner's answer:

Reddy discloses, the handset 220 or UE 105 sends a connection request including the stored IMSI information to the Core Network 125 through UTRAN node 120 or with IP address. Here, the handset is initiating a logical connection between the handset and core network, through UTRAN Node 120.

Here, Reddy teaches, once the mobile unit receives the system information, the mobile **initiates** the connection request with IP address and/or User information to UTRAN node 120.

Here, once say the mobile is served by circuit switched network, and the mobile sends request for connection with IP address, and user information to all IP network, before dropping the existing connection - Figs. 4/S8 and S11, 5/S17, 6/S23 and S25A, 7/S30 and S34.

Applicant's argument:

Lin fails to solve the deficiencies of Reddy, as discussed above. The process in steps 6.1 - 6.6 deals with the registration process for a telephone moving between registration areas - col. 6, lines 13 - 17). Under Lin, the described process deals with HLR information that is stored in the HLR for visitor location registers – VLR for "overflow" terminals during registration (col. 6, lines 39 – 65). Thus an "existing connection" cannot be had until the registration is completed (col. 6, lines 13 – 18, col. 7, lines 4 – 11). Additionally, there is no apparent reason why one having ordinary skill in the art would combine the references in the manner suggested in the Office Action, on page 15, lines 20 – 31.

Examiner's answer:

Please, refer examiner's answer above which discusses, the applicant's argument regarding deficiencies in Reddy.

Lin can have more functionalities other than claimed ones.

The functionalities of Reddy, in combination with the functionalities of Lin, for polling specific subscriber data which can include which kind of the wireless networks the mobile subscriber can use, specific features that the mobile subscriber had accessed (Fig. 7, steps s6.3 - s6.6, column 6, line 50 through column 7, line 11), reads on the claimed features of claim 1.

It would have been obvious to one of ordinary skill in the art, at the time of the instant invention, to modify mobile unit having internet protocol functionality of Reddy, wherein, the handset with USIM card (Fig. 2/200), would have incorporated the handset (the handset sends request message to VLR2, and VLR2 polls the data from the HLR and passes on to the subscriber, polls specific subscriber data of the wireless local network (Lin, Fig. 7) of Lin, for the mobile station selectively transmits information to one or more networks for establishing a communication link with the network (Reddy, paragraph 0016).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

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Respectfully submitted,

/Nimesh Patel/

Examiner, Art Unit 2617

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